



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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MAR 12 2008

Ref: EPR-N

Ms. Elaine Raper
Miles City Field Manager
Bureau of Land Management, Miles City Field Office
P.O. Box 219
Miles City, Montana 59301

Re: Draft Supplemental Air Quality Analysis for the Draft
Supplement to the Montana Statewide Oil and Gas
Environmental Impact Statement and Amendment of the
Powder River and Billings Resource Management Plans,
CEQ # 20070021

Dear Ms. Raper,

In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Bureau of Land Management's (BLM) Supplemental Air Quality Analysis (SAQA) for the Draft Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Amendment of the Powder River and Billings Resource Management Plans (Draft SEIS).

The Supplemental Air Quality Analysis was prepared to augment the February 2007 Draft SEIS and disclose additional air quality analyses that were performed for the BLM. The Draft SEIS considers and analyzes the impacts associated with oil and gas activity, including exploration, production, development, and reclamation in the Powder River and Billings Resource Management Planning (RMP) Areas. Under the Preferred Alternative (Alternative H), BLM estimates up to 18,225 coal bed natural gas (CBNG) wells would be drilled over the next 23 years in the Montana portion of the Powder River Basin, of which approximately 47 percent involve Federal minerals managed by BLM. The air analysis conducted for the February 2007 Draft SEIS showed the potential for CBNG project-related activities to have an impact on visibility at certain Class I areas, including the Northern Cheyenne Indian Reservation. BLM conducted the Supplemental Air Quality Analysis to address these potential project-related impacts and to determine what level of mitigation was needed to avoid impacts to Class I areas.

As a result of the SAQA, BLM has modified the Air Quality Screen for the Preferred Alternative (Alternative H) to more proactively track development and assess potential impacts related to CBNG project-related development. The goal of the Air Quality Screen is to identify

and implement mitigation measures before any days of visibility impairment occur from project-related development to nearby Class I areas; specifically, the Northern Cheyenne Indian Reservation. Under the Revised Air Quality Screen, BLM would conduct an annual review of available monitoring data collected in Class I areas, including the designated Northern Cheyenne Indian Reservation. In addition, the Montana Department of Environmental Quality (MDEQ) would complete annual cumulative air quality modeling to track air quality impacts of CBNG development. If observed effects and modeled impacts completed for the MDEQ annual review show state or federal regulatory standards or applicable thresholds for air quality related values (i.e. visibility) would be exceeded, BLM would require additional mitigation measures on CBNG development. Furthermore, BLM would approve additional CBNG Application for Permits to Drill (APDs) only if it could be demonstrated that they would not contribute to the exceedances of applicable ambient air quality standards.

The Revised Air Quality Screen also includes measures specific to protection of visibility. Based on the modeling presented in the SAQA, BLM has identified a threshold at which additional visibility modeling would be performed. The potential for direct project impacts to visibility is primarily due to emissions from sulfur oxide and nitrogen oxides from compressor engines. Thus, BLM developed a threshold based on compressor engine horsepower requirements. The modeling prepared for the SAQA indicates that zero days of visibility impacts would occur on the Class I Northern Cheyenne Reservation if horsepower levels are no greater than 148,840, which is equal to 50 percent of the horsepower required for the high end full field development scenario of 18,225 wells (297,680 hp). To ensure that appropriate actions can be taken in time to mitigate visibility impacts, BLM selected 90 percent of this value as the visibility screening threshold. Thus, once the compressor engines reach this horsepower threshold of 133,956, BLM would conduct additional modeling and implement appropriate actions to prevent visibility impairment. The thresholds identified in the Air Quality Screen and the modeling upon which they are based should provide operators with leases in the Montana Power River Basin with an incentive to minimize emissions from compressors to enable development to continue while maintaining compliance with the Clean Air Act. To this end, EPA encourages the use of the 1.0 gram NO_x/bhp-hr compressor engines.

EPA has completed review of the SAQA and has three primary recommendations: establishment of future stakeholder involvement; mechanisms for additional NO₂ near-field modeling; and additional NO₂ monitoring. EPA's comments on water quality, monitoring and groundwater issues in the Draft SEIS were provided to BLM in a letter dated May 2, 2007.

Future Stakeholder Involvement

EPA commends BLM for development of an Air Quality Screen designed to protect visibility impacts at the designated Class I Northern Cheyenne Indian Reservation. As the Air Quality Screen is implemented, we recommend that BLM take measures to ensure that interested parties are adequately involved in this endeavor. Over the past several years, EPA has worked closely with the Northern Cheyenne Indian Reservation to protect visibility. EPA recommends the Final SEIS and subsequent Record of Decision include a mechanism for public disclosure of the future air quality modeling and horsepower threshold calculations completed under the

Revised Air Screen. For example, BLM could issue an annual summary disclosing the total horsepower permitted for that year and the cumulative horsepower total in relation to the threshold; the results of the monitoring data collected by BLM; and the results of the air quality modeling completed by the MDEQ. Data and analysis conducted under the Air Quality Screen will be important to share with relevant stakeholders including the Northern Cheyenne Indian Reservation, the Crow Indian Reservation, the MDEQ, and the general public. The data and analysis will also be important for energy companies in planning future development in the area.

NO₂ Near-Field Modeling and Monitoring

The cumulative impact analysis included in the SAQA suggests the potential for exceedances of the Montana Ambient Air Quality Standard (MAAQS) for NO₂. BLM's Revised Air Quality Screen is designed to identify and mitigate these potential impacts before they occur. To address this potential for exceedances, the Revised Air Quality Screen notes that "BLM would approve additional APDs only if can be demonstrated that they would not contribute to the exceedances of air standards." (SAQA, page 2). Nonetheless, the SAQA suggests the need for BLM to closely monitor the NO₂ levels to ensure compliance of future drilling activities with the MAAQS. EPA recommends BLM conduct near-field air quality modeling, such as AERMOD, prior to approval of any project-specific development proposals. EPA understands near-field air quality modeling may already be incorporated into the permitting process by MDEQ. If so, EPA suggests the Final SEIS include a discussion of this process and clarify that additional near-field modeling will occur prior to approval of project-specific development. Finally, given the results disclosed in this Supplemental Air Quality Analysis, EPA recommends BLM work with the operators and MDEQ to fund and install additional NO₂ monitors in the area.

BLM's air quality analysis reinforces the benefits to visibility and NO₂ concentrations from lower emission compressor engines. The analysis suggests a 29 percent reduction in the one-hour NO₂ levels from direct project impacts with the 1.0 gram NO_x/bhp-hr compressor engines compared to the 1.5 gram NO_x/bhp-hr compressor engines. With potential reductions in NO₂ concentrations and improvement to visibility, EPA encourages the implementation of the low emission, 1.0 gram NO_x/bhp-hr compressor engines.

EPA's Rating

In accordance with our responsibilities under the Clean Air Act Section 309, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. On May 2, 2007, EPA reviewed and provided comments on the Draft SEIS document, with the exception of the air quality impacts analysis. At that time, BLM indicated their intent to provide a Supplemental Air Quality Analysis and subsequently confirmed this intent in a Federal Register notice published on June 6, 2007. As BLM was providing Supplemental Air Quality Analyses, EPA withheld the rating on the Draft SEIS until this Supplemental Analysis was completed and provided for public review. Therefore, EPA's rating is based both on the February 2, 2007 Draft SEIS document (CEQ #2007002) and the SAQA dated November 26, 2007 (CEQ # 20070021).

Based on the concerns raised in EPA's May 2, 2007, letter to BLM and the enclosed review of the SAQA, EPA is rating this Draft SEIS as "Environmental Concerns – Insufficient Information" (EC-2). The "EC" rating means that EPA's review of the Draft SEIS has identified potential impacts to air quality and water quality that should be avoided in order to fully protect the environment. The "2" rating means that EPA's review of the Draft SEIS has identified additional information, data, analyses, or discussion that should be included in the Final SEIS. Please refer to our May 2, 2007, comment letter for additional information. We have enclosed a copy of the May 2, 2007, comment letter and a description of EPA's EIS rating system for your convenience.

If you have any questions regarding our comments or this rating, please contact Joyel Dhieux at 303-312-6647 or me at 303-312-6004.

Sincerely,



Larry Syoboda
Director, NEPA Program
Office of Ecosystems Protection and Remediation

Enclosures

cc: David Klemp, MDEQ